

## DEFORMATION REDUCTION AT THE MAIN CHAMBER

## ABSTRACT

5

A vacuum chamber with a cover with a first section, a second section, and a pocket between the first section and second section is provided. The vacuum chamber has a main cavity to which the first section is adjacent. The vacuum chamber may be used for plasma processing, which may require a critical element to be supported by the first section. The pocket is in fluid communication with the main cavity. When a vacuum is created in the main cavity, the pressure is also reduced in the pocket. As a result, the second section of the cover is deformed by the vacuum in the pocket. However, the vacuum in the pocket helps to prevent the first section from deforming, providing better support for the critical element.

2025 RELEASE UNDER E.O. 14176